



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,119	04/20/2004	Stuart A. Fraser	99-1002-C1	6481

63710 7590 09/14/2007  
DEAN P. ALDERUCCI  
CANTOR FITZGERALD, L.P.  
110 EAST 59TH STREET (6TH FLOOR)  
NEW YORK, NY 10022

EXAMINER
----------

LOFTUS, ANN E

ART UNIT	PAPER NUMBER
----------	--------------

3694

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/14/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gfarbanish@cantor.com  
apapageorgiou@cantor.com  
dboundy@cantor.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/829,119	FRASER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ann Loftus	3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 38, 41 and 45-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 38, 41 and 45-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

***Status of the Claims***

1. This action is in response to the amendment filed 7/2/07. Previously, claims 38-44 were examined. This amendment cancels claims 39-40 and 42-44 and adds claims 45-75, so that claims pending are 38, 41, and 45-75. This application is a continuation in part of parent 09/553423 filed 4/19/2000, which had a provisional application filed 4/30/99.

***Response to Arguments***

2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Drawings***

3. The drawings filed on 7/2/07 are accepted.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 38, 58 and 67 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to two classes of matter.

35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and

useful improvement thereof" (emphasis added). Claims 38, 58 and 67 embrace or overlap *two* different statutory classes of invention as set forth in 35 USC 101. The claims begin by claiming an apparatus but no structure of the apparatus is given. The claim bodies deal with method steps: determining, receiving, determining, canceling and executing. "A claim of this type is precluded by the express language of 35 USC 101 which is drafted so as to set forth the statutory classes of invention in the alternative only", Ex parte Lyell (17 USPQ2d 1548).

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 38, 48-53, 58, 60-65, 67, and 69-74 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claims 38, 58 and 67, the term "determine a period of time" is not clear enough to enable a person to make or use the invention. Suppose the period determined, such as between lunch and breakfast, had indefinite start and stop times, or had already passed or was entirely in the future such as the next millennium. Even if a length of time, such as ten years or ten nanoseconds, was chosen, it might not work. Ten years is too long to be practical and ten nanoseconds is too short to be effective.

Art Unit: 3694

The specification does not discuss how to determine an effective range. It would take undue experimentation to discover a period of time that enables the invention.

As to claims 48-53, 60-65 and 69-74, the acts of determining a period of time based on an item, a type of item, or a parameter are mentioned by the specification, but it does not explain how. A person of ordinary skill in the art at the time of the invention would not know how to determine a period of time based on an item, a type of item or a parameter in such a way as to use the invention. This also applies to determining a second period of time.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 38, 52-56, 58, 64-67, and 73-75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 38, 58 and 67, as described above, the claims begin as an apparatus and then describe method steps instead of structure. Thus it is not clear what statutory class is claimed. The metes and bounds of the claims are unclear.

As to claims 38, 58 and 67, the term "computing device" is unclear. While the central concept of a computing device is understood, the boundaries of its definition are not clear. Is a watch a computing device? Is a pencil a computing device? Is a telephone a computing device? The metes and bounds of the claims are unclear.

As to claims 38, 58 and 67, making an order available might mean available for reading as opposed to available for bidding. The metes and bounds of the claims are unclear.

As to claim 55, the phrase "value of zero" is unclear. A period of time does not have resale value. Does a period of time with a length of zero exist at all? How is it determined? The metes and bounds of the claims are unclear.

As to claims 52-56, 64-66, and 73-75, the examiner is unclear as to the relevance of the second period of time after it is determined. How does it affect the apparatus? The metes and bounds of the claims are unclear.

As to claims 58 and 67, if an order first arrives during the period, then it will first be executed and then also be cancelled when the period ends. The metes and bounds of the claims are unclear.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 38, 41, and 45- 75 are rejected under 35 U.S.C. 102(b) as being anticipated by Wiseman.

As to claims 38, 58 and 67, Wiseman teaches in Fig 3 an apparatus comprising a computing device. Wiseman teaches in claim 1 receiving from a first participant an order

for an item and making the order available to at least a second participant. Since in Figure 5 the transactions are logged on both sides, and thus available for as long as necessary, it is inherent that the transactions are available for at least the period of time. Wiseman teaches receiving from the first participant a command to cancel the order in col 19 lines 35-55.

Wiseman teaches in col 19 lines 35-55 a period of time when a cancel command is inoperative. Determining the period of time is inherent in the way the proposal state affects actions. In this case, the period of time is from the beginning of the proposal state until the proposal is changed. Wiseman teaches canceling the order when the command to cancel is received after this period of time. Wiseman teaches continuing the trade when the command to cancel is received during the period of time. Wiseman teaches executing a trading command against the order in col 4 lines 40-50.

As to claim 58, in order for the system to be able to decide to not accept the cancel command during the period when the command should be inoperative, as above, it inherently must determine in response to the command to cancel whether the period of time has lapsed (col 19 lines 35-55).

As to claim 67, since Wiseman's proposal state begins when the proposal is sent to a second participant, the order has been available to the second participant since the beginning of the period of time (col 19 lines 35-55). It remains available in the log (Figure 5) as long as needed. The period of time is thus equivalently chosen as from the point when the proposal is available to the second participant until the proposal is changed, so that Wiseman teaches in response to the command to cancel, determining

Art Unit: 3694

whether the order has been made available to the at least second participant for at least the period of time, canceling the order when the order has been made available to the at least second participant for at least the period of time and executing a trading command against the order when the order has not been made available to the at least second participant for at least the period of time.

As to claim 41 and 57, Wiseman teaches the item traded is currency or a first and second type of currency (currency pairs) in col 8 lines 60-70.

As to claims 45, 59 and 68, Wiseman teaches (col 19 lines 35-55) receiving from the second participant the trading command; and receiving the command to cancel prior to receiving the trading command.

As to claim 46, Wiseman teaches in col 3 lines 23-55 a quote that can be to buy or sell. In the abstract, Wiseman teaches a proposal following the quote that inherently could be either to buy or sell. Thus Wiseman teaches an order comprised of at least one of a bid, and an offer; and in which the trading command comprises at least one of: a hit of the bid, and a lift of the offer.

As to claim 52, 64 and 73, Wiseman teaches a second order for a second item in col 23 lines 20-35. Thus Wiseman teaches receiving a second order for a second item; and determining a second period of time.

The remaining claims are rejected as depending on rejected parents.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48-51, 53-55, 60-63, 65, 66, 69-72, 74 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiseman in view of US patent No. 5347452 filed 7/12/91 by Bay. Bay discusses the timing of trading operations, and would be relevant to the problem of how to determine a period of time within a trading operation.

As to claim 49-51, 53, 56, 61-63, 65, 70-72 and 74 Wiseman does not explicitly teach determining a period of time based on an item, a type of item or a parameter. Bay teaches in col 2 lines 1-20 a period of time based on the item, and based on a parameter. Since a period of time based on an item is not based on an individual item (in a commodities trade) it must be based on characteristics of the item, and thus the period would be the same for items that shared those characteristics. A period of time based on a type of item is inherent in Bay. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Wiseman to include determining a period of time based on the item, a type of item or a parameter in order to reflect the nature of each market. Wiseman teaches a second order for a second item in col 23 lines 20-35.

As to claims 48, 60, and 69, Wiseman does not explicitly teach a predetermined period of time. Bay teaches a predetermined period of time in the abstract. It would

have been obvious to a person of ordinary skill in the art at the time of the invention to modify Wiseman to add a predetermined time period in order to inform traders ahead of time of the time period.

As to claim 54, 66 and 75, Wiseman teaches a period of time between the beginning of a proposal state and a change in a proposal. It would have been obvious to a person of ordinary skill in the art at the time of the invention that this period would inherently vary. Thus Wiseman teaches a period of time for the item is different from the second period of time for the second item.

As to claim 55, determining a second period of time with no value is the same as not determining a period of time. Elimination of an element or its functions is deemed to be obvious in light of prior art teachings of at least the recited element or its functions (see *In re Karlson*, 136 USPQ 184, 186; 311 F2d 581 (CCPA 1963)).

10. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wiseman in view of Official Notice.

As to claim 47, Official notice is taken that it is old and well-known to receive on a passive side of a market the order for the item; and in which the trading command comprises at least one of a command to trade all of the passive side of the market, a hit command to trade down to a first price, and a lift command to trade up to a second price. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Wiseman to add to receive on a passive side of a market the order for the item; and in which the trading command comprises at least one of a command to

Art Unit: 3694

trade all of the passive side of the market, a hit command to trade down to a first price, and a lift command to trade up to a second price in order to support a variety of trades and draw more trading customers.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Loftus whose telephone number is 571-272-7342. The examiner can normally be reached on M-F 8-4.

Art Unit: 3694

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AL  
9/9/07

  
ELLA COLBERT  
PRIMARY EXAMINER